Texas Consortium for Computational Seismology

Monday, September 30, 2013		
8:30-9:00	Coffee and pastries	
9:00-9:15	Robert Moser	Welcome from ICES
9:15-9:45	Sergey Fomel	Introduction
9:45-12:00	Morning session: Imaging Faults and Fractures	
	Vladimir Bashkardin	3-D multi-arrival Kirchhoff migration
	Luke Decker	Comparison of diffraction imaging methods
	Parvaneh Karimi	Novel seismic attributes
	Mehdi Far	Fracture detection using multicomponent data
12:00-1:00	Lunch	
1:00-5:00	Afternoon session: Time-Domain Imaging	
	Karl Schleicher	Data processing on Stampede
	Siwei Li	Time-to-depth conversion and velocity estimation
	Jingwei Hu	Quasi-random choice method for Liouville PDE
	Sergey Fomel	Oriented velocity continuation
	Alexey Stovas (NTNU)	Generalized moveout approximation
5:30-8:30	Wine reception and dinner at Clay Pit Restaurant	

Sixth Bi-Annual Research Meeting

Tuesday, October 1, 2013		
8:30-9:00	Coffee and pastries	
9:00-12:00	Morning session: Full-Wave Modeling and Imaging	
	Björn Engquist	Remarks on preconditioning and Wasserstein metric
	Brittany Froese	Wasserstein metric and the Monge-Ampere equation
	Junzhe Sun	One-step lowrank wave extrapolation
	Gang Fang (CUP)	Staggered-grid lowrank finite differences
	Jiubing Cheng (Tongji)	Elastic wave-mode separation and elastic RTM
12:00-1:00	Lunch	
1:00-3:30	Afternoon session: Inverse Problems	
	Hejun Zhu	Seismic wavefield tomography in global seismology
	Yangkang Chen	Iterative deblending of simultaneous-source data
	Pengliang Yang	Iterative half-thresholding for data interpolation
	(Xi'an Jiaotong)	
3:30-4:30	Stanley Osher (UCLA)	What sparsity and L_1 minimization can do for you
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Already in 1973 Claerbout and Muir realized that L_1 norm is a powerful estimator in exploration seismology when the data is noisy or the model is sparse. At that time there were no fast numerical L_1 algorithms that could compare with the L_2 techniques. Progress during the last few years has changed that picture. Professor Osher has been leading this remarkable development in L_1 -based minimization, exploration of sparsity, and image processing.

The meeting location is Room 6.304, Peter O'Donnell Building (POB) on the University of Texas at Austin main campus, 201 E 24th Street, Austin, TX 78712.

The dinner location is Clay Pit, 1601 Guadalupe Street, Austin, TX 78701.